

STRATEGY
RESEARCH
PROJECT

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

**THE RAPID ASSESSMENT AND INITIAL DETECTION
(RAID) PROGRAM**

BY

LIEUTENANT COLONEL OLIVER L. NORRELL, III
United States Army National Guard

DISTRIBUTION STATEMENT A:
Approved for Public Release.
Distribution is Unlimited.

USAWC CLASS OF 1999



U.S. ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013-5050

USAWC STRATEGY RESEARCH PROJECT

THE RAPID ASSESSMENT AND INITIAL DETECTION (RAID)

PROGRAM

by

LTC OLIVER L. NORRELL, III
ARNG

JAMES L. GRIGGS
Project Advisor

The views expressed in this academic research paper are those of the author and do not necessarily reflect the official policy or position of the U.S. Government, the Department of Defense, or any of its agencies.

DISTRIBUTION STATEMENT A:
Approved for public release.
Distribution is unlimited.

U.S. Army War College
CARLISLE BARRACKS, PENNSYLVANIA 17013

ABSTRACT

AUTHOR: OLIVER L. NORRELL, III

TITLE: THE RAPID ASSESSMENT AND INITIAL DETECTION (RAID) PROGRAM

FORMAT: Strategy Research Project

DATE: 1 APRIL 1999 PAGES: 41 CLASSIFICATION: Unclassified

Terrorism has been and continues to be a critical problem for the United States. In 1998, the Department of Defense initiated a program that designated the National Guard as the first military responder to the use of weapons of mass destruction in the continental United States. This paper examines the existing structure of the Rapid Assessment and Initial Detection (RAID) elements in light of technological advances which may take place by the year 2020.

TABLE OF CONTENTS

ABSTRACT	iii
THE RAPID ASSESSMENT AND INITIAL DETECTION (RAID) PROGRAM	1
TERRORISM DEFINED	1
U.S. GOVERNMENT'S POSITION ON TERRORISM	2
RAPID ASSESSMENT AND INITIAL DETECTION (RAID) PROGRAM	7
THE WORLD IN 2020	17
2020 RAID TEAMS	22
HYPOTHETICAL SCENARIO	24
CONCLUSION	28
ENDNOTES	31
BIBLIOGRAPHY	33

THE RAPID ASSESSMENT AND INITIAL DETECTION (RAID) PROGRAM

The National Guard in a Counter-terrorism Role

Terrorism has been and continues to be a critical problem for the United States as well as for the rest of the world. Thirty-nine incidents of terrorism occurred across the world in 1998. Among these incidents were the bombings of the U.S. embassies in Kenya and Tanzania. According to the Quadrennial Panel Review¹, the National Defense Panel², and the October 1998, issue of "A National Security Strategy for a New Century,"³ terrorism is expected to increase and will continue to threaten U.S. interests.

For the purposes of this paper, it is first necessary to define "terrorism" and then to analyze how the U.S. military will respond to incidents of terrorism that may occur in the continental United States. This paper will then hypothesize how such incidents will be handled in the year 2020.

TERRORISM DEFINED

The root word of "terrorism" is "terror," which is derived from the Latin verbs *terre* - "to cause to tremble," and *deterre* - "to frighten." Thus the object of terrorism is to frighten or terrorize a nation's government and/or its citizens. Usually this is done in an attempt to achieve a political or religious end. Terrorists believe in and practice the Clausewitzian

concept of "total war." In 1979 the Israelis defined terrorism as "the deliberate and systematic murder, maiming, and menacing of the innocent to inspire fear for political ends."⁴

Other meanings of "terrorism" can be gleaned from the following definitions that include the major elements of the threat and the act of terrorism:

Terrorism is the threat of violence and the use of fear to coerce, persuade and gain public attention.

Political terrorism is the use, or threat of the use, of violence by an individual or group, whether acting for or in opposition to established authority, when such action is designed to create extreme anxiety and/or fear inducing efforts in a target group wider than the immediate victim with the purpose of coercing that group into acceding to the political demands of the perpetrators.

Terrorism can be defined as a purposeful human activity directed toward the creation of a general climate of fear designed to influence in ways desired by the protagonist, other human beings, and through them some course of events.⁵

For the purposes of this paper, the last definition best describes the effects as well as the reasons for terrorism.

U.S. GOVERNMENT'S POSITION ON TERRORISM

In his 1998 National Security Strategy (NSS), President Clinton named terrorism as a transnational threat and proposed the following strategies to combat this threat:

(1) make no concessions to terrorists; (2) bring all pressure to bear on state sponsors of terrorism; (3) fully exploit all available legal mechanisms to punish international terrorism;

and (4) help other governments improve their capabilities to combat terrorism.⁶

According to "1998 Strategic Assessment, Engaging Power for Peace," the United States has identified seven foreign government "sponsors" of terrorism. These governments are Cuba, North Korea, Syria, Libya, Iran, Iraq and Sudan. Of these seven governments only Iran, Iraq, and Sudan continue to be active sponsors of terrorism. However, the other four governments "continue to harbor terrorists and to maintain the infrastructure for terrorist training."⁷

The NSS places terrorism at the top of the diplomatic agenda with the hope and expectation that there will be an increase in the sharing of information concerning terrorists which will enhance identification, tracking, detention and arrest and prosecution. As one of its tools against terrorism, the U.S. places economic sanctions against those states which support and protect terrorists. For example, the U.S. continues to freeze the assets of Iran and has continued to ban trading with Iran until such time as the U.S. determines that Iran no longer supports or encourages terrorism.

According to the "Report of the Quadrennial Defense Review" of May 1997:

U.S. interests will continue to be challenged by a variety of transnational dangers, and the lives of U.S. citizens will often be placed at risk,

directly and indirectly. Increasingly capable and violent terrorists will continue to directly threaten the lives of American citizens and try to undermine U.S. policies and alliances [U]nconventional means of attack, such as terrorism, are no longer just threats to our diplomats, military forces, and private American overseas, but will threaten Americans at home in the years to come.⁸

The National Defense Panel also noted that:

Threats to the United States have been magnified by the proliferation of, and the means to produce and deliver, weapons of mass destruction. The increasing availability of relatively inexpensive cruise missiles and the capability to fabricate and introduce biotoxins and chemical agents into the United States means that rogue nations or transnational actors may be able to threaten our homeland. Along with the growth of delivery systems, the technology needed to create warheads housing nuclear, chemical, or biological weapons has also proliferated. The complexity of the WMD challenge lies in the number of potential enemies who have access to, and may choose, this asymmetric means of attacking the United States in an effort to offset our conventional strengths.⁹

On August 24, 1998, in response to the bombings of the U.S. embassies in Kenya and Tanzania, U.S. Secretary of State Madeleine Albright stated that "[w]e will not be intimidated And we will do all we can to see that those who perpetrated these deadly acts are held responsible. Organized terrorist groups have become a major threat to our security."¹⁰ In August 1998, on this same issue, President Clinton announced, " America has battled terrorism for many years. Where possible, we've used law enforcement and diplomatic tools to wage the fight."¹¹

In 1995, the President signed legislation instructing the Department of State to prepare a list of foreign terrorist organizations with ties in the United States. Once identified, these organizations will be banned from raising funds in the U.S. and their members will be banned from entry into the U.S.

On October 8, 1997, the U.S. Secretary of State designated 30 organizations as being foreign terrorist organizations. Among these organizations are: Abu Nidal Organization (ANO); Aum Shinrikyo (Aum); al-Jihad, Khmer Rouge; Kurdistan Worker's Party (PKK); National Liberation ARmy (ELN); Palestine Liberation Front - Abu Abbas (PLF); and Shining Path (Sendiro Luminoso, SL).¹²

As a result of a loophole in the federal law, the attempt to make a threat to use bio-chemical weapons and the attempt to acquire these weapons were not crimes until recently. This loophole caused some concern for law enforcement authorities. The 1996 Anti-Terrorism Act closed this hole by enlarging the federal criminal code to cover not only the use of biological agents, chemical agents, and toxins as weapons, but also criminalizing any attempt, threat, or conspiracy to acquire or use them.

In June 1997, the leaders of the eight great world powers met in Denver, Colorado. This meeting, called the Summit of the Eight, consisted of the leaders of Canada, France, Germany,

Italy, Japan, Russia, the United Kingdom and the United States.

At this meeting, these leaders:

reaffirmed their determination to combat terrorism in all forms, their opposition to concessions to terrorist demands and their determination to deny hostage-takers any benefits from their acts...[These] leaders also agreed to strengthen the capability of hostage negotiation experts and counter terrorism response units, to exchange information on technologies to detect and deter the use of weapons of mass destruction in terrorist attacks, to develop means to deter terrorist attacks on electronic and computer infrastructure...¹³

In January 1998, the United States signed the International Convention for the Suppression of Terrorist Bombings. This convention expanded the legal framework for international cooperation in the "investigation, prosecution and extradition of persons who engage in such bombings."¹⁴

There are currently 42 signatories and two parties to this Convention. Among these countries are Algeria, Canada, the Czech Republic, France, Germany, Ireland, Israel, Panama, the Russian Federation, the United Kingdom of Great Britain and Northern Ireland, and Uzbekistan. This Convention is not yet in force.

From these actions and others, it is clear that the United States has begun to concentrate on the threat of the use of weapons of mass destruction (WMD) in the continental U.S., understanding that America and Americans everywhere will

continue to be a high-priority target of opportunity for terrorists in the foreseeable future. Not only has the government made it tougher for terrorists to operate in the U.S., it also has attempted to clamp down on terrorism abroad by a wide range of legal actions and treaties. Such efforts demonstrate the seriousness and resolve of the U.S. concerning this issue. The United States has now begun to focus on "Homeland Defense," a term found in much of the literature on defense of the continental United States against terrorists.

The three key objectives of the U.S.' national counter-terrorism strategy are:

- Reduce vulnerabilities to terrorist attacks and prevent and deter terrorist acts before they occur (threat/vulnerability management);
- Respond to terrorist acts that occur, end the crisis or deny terrorists their objectives, and apprehend and punish terrorists (crisis management);
- Manage the consequences of terrorist acts, including restoring essential government services and providing emergency relief, to protect public health and safety (consequence management).¹⁵

RAPID ASSESSMENT AND INITIAL DETECTION (RAID) PROGRAM

In 1996, Senators Sam Nunn (D-Georgia), Richard Lugar (R-Indiana) and Pete Domenici (R-New Mexico) brought the need for a comprehensive national response plan to terrorism into the public eye by drafting the Defense Against Weapons of Mass Destruction Act -- later enacted as Title XIV of the FY97 Defense Authorization Act. It required the study of the

capabilities of the United States to respond to incidents of mass destruction, mandated a plan to rectify any shortcomings and provided funding to improve the capabilities to prevent and respond (if necessary) to domestic terrorist incidents involving WMD.

The National Defense Panel reviewed the government's ability to so respond and recommended that the National Guard and the Army Reserve be prepared to:

- Train local authorities in chemical and biological weapons detection, defense, and decontamination;
- Assist in casualty treatment and evacuation;
- Quarantine, if necessary, affected areas and people; and
- Assist in restoration of infrastructure and services,¹⁶

The results of these different analyses led President Clinton to sign Presidential Decision Directives (PDD) 62 and 63. PDD 62 established the Office of the National Coordinator for Infrastructure Protection and Counter-Terrorism, which will oversee the broad variety of relevant policies and programs including such areas as counter-terrorism, protection of critical infrastructure, preparedness and consequence management for weapons of mass destruction.¹⁷ PDD 63 "makes it U.S. policy to take all necessary measures to swiftly eliminate any significant vulnerability to physical or information attacks on

our critical infrastructures, especially our information systems."¹⁸

In early 1998, prior to these PDDs, the Department of Defense (DoD) designated the National Guard as the first military responder to incidents of weapons of mass destruction in the continental United States. This new assignment required the National Guard and Army Reserve to establish teams which will respond to scenes involving the use of WMD. These teams are to be used for consequence management.

This new mission is consistent with the National Guard's overall mission. The National Guard is the only military force with the experience to deal with civilian law enforcement, judicial, and emergency response agencies in a time of national crisis. "The first line of defense a governor has to get resources is to call out the National Guard, and that happens even before Federal Emergency Management Agency (FEMA) gets there."¹⁹ The National Guard, with its dual-hatted responsibilities to the federal government as well as to the states in time of emergency, is particularly well suited for this mission.

The National Guard, which traces its roots back to the early militias, was formed by the colonies for self-protection. These militias were incorporated into the U.S. Constitution under Article I, Section 8, where they were organized to execute

the laws of the union, suppress insurrections and repel invasions. The National Guard was later tasked to prepare legitimate second tier land or air forces, be adequate to join in the first line of defense, and be an effective deterrent domestically. The mission of responding to scenes of the use of WMD fits into the latter category

With over 3,300 armories in the continental United States, the National Guard provides direct access to local units and soldiers. Because of their dual-hatted mission (federal and state), these armories have the unique capability to connect the Pentagon to the local populace. The Guard provides unique rapid response capabilities and command and control capabilities which are unmatched by any other federal or state agencies.

The Nunn-Lugar-Domenici Act also gave the Department of the Army the responsibility of training 120 cities to respond to WMD incidents. These cities were identified as being the 120 cities most likely to be subjected to terrorist attacks.

DoD proposed that the National Guard initially organize ten 22-man teams to cope with this new mission. Individuals assigned to these teams are full-time National Guard soldiers whose only duties are to be prepared to respond to scenes of incidents of mass destruction, as required. These teams are to be stationed in ten different states. These locations correspond to the various FEMA areas and are near large

metropolitan areas, which will facilitate the use of available National Guard aircraft. With the funds provided in the FY1999 federal budget, these teams are becoming a reality. They are to be located as follows:

- 1st RAID Element - Natick, MA
- 2nd RAID Element - Stratton Air National Guard Base, Scotia, NY
- 3rd RAID Element - Fort Indiantown Gap, PA
- 4th RAID Element - Dobbins Army Reserve Base, Marietta, GA
- 5th RAID Element - Camp Lincoln, Springfield, IL
- 6th RAID Element - Bergstrom Airport, Austin, TX
- 7th RAID Element - Ft. Leonard Wood, MO
- 8th RAID Element - Buckley Air National Guard Base, Aurora, CO
- 9th RAID Element - Armed Forces Reserve Center, Los Alamitos, CA
- 10th RAID Element - Camp Murray, Tacoma, WA

Each RAID element will consist of a two-person command team; a four-person operations team; a two-person administration and logistics team; a two-person communications team; a four-person medical team; and a two-person survey team. The RAID element leader will be a lieutenant colonel. Each element's mission will be to deploy to an area of operations to:

- assess a suspected nuclear, biological, chemical, or radiological event in support of a local incident commander.
- advise civilian responders regarding appropriate actions.
- facilitate requests for assistance to expedite arrival of

additional State and Federal assets to help save lives, prevent human suffering, and mitigate great property damage.²⁰

The teams are to be cross-trained in reconnaissance, medical support, security, logistics, air liaisons and communications.

Notwithstanding the creation of these elements, the Department of Justice (DoJ) remains the lead agency for WMD incidents in the United States. However, the U.S. Army, as the executive agent for domestic preparedness, and DoD have been ordered to assist in building the U.S. WMD defenses. Thus, the military's mission is to support DoJ.

"The Department of Defense has established the Consequence Management Program Integration Office to oversee the integration of the reserve components into domestic preparations to respond to terrorist or other incidents involving weapons of mass destruction. The Army will supervise the office and its integration efforts."²¹

Training for these initial RAID elements is to begin this fiscal year (FY99). It is planned that by FY03 all states will have one fully operational element trained and in place. The initial ten RAID elements are to be augmented by 65 decontamination teams, 22 reconnaissance teams and 100 medical personnel that will be pulled from existing Guard units. The

start-up cost for the initial 10-state program is \$49.2 million.

This cost is to be distributed as follows:

- \$19.9 million for 220 active Guard and Reserve (AGR) positions to stand up Army National Guard RAID teams;
- \$15.9 million for patient decontamination and WMD reconnaissance training (over two years);
- \$6.9 million to establish and staff the DoD Consequence Management Program Integration Office;
- \$3.3 million to prepare medical personnel for operating in contaminated areas;
- \$1.8 million for additional emergency preparedness liaison officer training days; and
- \$1.4 million to upgrade simulation systems with WMD-effects modeling.²²

The first ten elements are scheduled to be operational by January 2000.

When reviewing the current RAID structure, the first issue is the rank held by the team leader, a lieutenant colonel (O-5). For an O-5 to be in command of 21 persons is, at first glance unusual. However, the selection of an O-5 for such a command reflects the apparent desire of the military to have a high-ranking interface with civilian authorities on the incident scene. To place this element under the command of a captain, or even a major, would detract from the apparent authority held by the commander when viewed from the eyes of civilians. The rank of lieutenant colonel gives the element leader the sufficient amount of respect and apparent authority so that interface with

the civilian responders can proceed without rank being an obstacle.

Another issue is that the timely arrival of the RAID element would be dependent upon the availability of transportation. As currently written, plans do not call for any dedicated transportation such as aircraft. If the incident scene is not close at hand, the probability that the element will be able to arrive in time to be of significant assistance is slight. If the RAID concept is to have any chance to succeed, adequate transportation will have to be on 24-hour alert, close at hand and dedicated.

The next issue is that a RAID element's mission is to respond within the first four hours following an incident. If the team is not one of the first on the scene, it will probably be more of an annoyance than an assistance. If there is a delayed arrival time, the wounded more than likely would have been identified and treated, the type of weapon used would have been identified, and any quarantine would either have been initiated or it would be too late to do so. The medical community has identified a "golden hour" during which time, if treatment is not administered within the first hour of a serious medical emergency, the expectation of successful treatment is seriously degraded -- almost exponentially. There is certain to be a similar period for the successful response to an incident

of mass destruction. If that period is less than the time a RAID element could be expected to arrive, then under certain scenarios the RAID element's mission of being the first military responder is unrealistic.

On the other hand, the RAID element could be invaluable in assisting federal state and local authorities in determining the type of chemical or biological weapon used if this determination has not been made by the time of their arrival. The element could also be of assistance by providing an interface for the authorities within the state's National Guard and federal military forces. There is also a possibility that there will be a requirement for equipment and clothing from the federal government that could be coordinated through the RAID element's logistics team. Finally, if the federal military is required to respond to the scene of an event, the RAID element could form the initial nucleus for the requisite military command post.

Even if the element arrives on the scene promptly, it is quite likely that it may be ignored by authorities who are unfamiliar with the element's mission, training and expertise. Therefore, the success of the elements may depend heavily on the education of federal, state and local authorities. This education should be aimed at the obvious responders and decision-makers in the local area: law enforcement, fire, rescue, and public officials. If the educational program is

successful, the element -- upon early arrival -- could provide invaluable assistance to such officials at the scene. In cases of chemical or biological attack, the element may be able to ascertain the exact nature of the weapon and, by doing so, assist the medical personnel at the scene and in the receiving hospitals in determining the appropriate course of treatment for the victims. Under such circumstances, the element also may be of assistance in determining whether to quarantine the area and the persons therein and also in determining the distance from the core of the incident that would mark the extent of the expected contaminated area.

In regard to the RAID medical team, it would be presumptuous to believe that localities, especially in major metropolitan areas, would not have medical personnel trained and experienced in triage and emergency treatment. However, by the very definition and nature of WMD, in the event of WMD use, these personnel would probably be overwhelmed by the numbers of casualties. The presence of the RAID medical team would provide valuable assistance as a communications link between the local medical personnel and the state and federal governments. Through these teams, the local medical personnel would have quicker access to communications with non-local experts and better access to sera and other treatment options through liaison with the military.

The RAID communications team would be instrumental in establishing a basis for a coordinated communications link if the WMD incident eliminated or severely deteriorated the local communications network. The RAID communications team should be able to establish a communications network with local, state, and maybe national communications contacts in the area. Such communications should be of tremendous assistance to the medical teams when seeking the advice of experts in the fields of nuclear, biological, or chemical warfare.

When viewed in the scenario above, the RAID elements would be clear assets to the local authorities and would also assist the state and federal government in monitoring the situation and determining the extent of outside assistance that would be necessary.

THE WORLD IN 2020

Hans Binnendijk of The Institute for National Strategic Studies, National Defense University, believes that "[o]ne obvious manifestation of the post-Cold War world has been the proliferation of WMD - nuclear, biological weapons; ballistic missiles; and soon, cruise missiles. Their use by rogue states and non-state groups will pose a first-order challenge to the United States two decades from now."²³ This problem has a "pronounced transnational character involving terrorist groups, insurgents." The Institute's analysts view this threat as

growing and predict that by the year 2018, terrorism will be one of the two dominant challenges facing the United States.²⁴

Michio Kaku states in his 1998 book, VISIONS - How Science Will Revolutionize the Twenty-first Century:

Clearly, we are on the threshold of yet another revolution. Human knowledge is doubling every ten years. In the past decade, more scientific knowledge has been created than in all of human history. Computer power is doubling every eighteen months. The Internet is doubling every year. The number of DNA sequences we can analyze is doubling every two years. Almost daily, the headlines herald new advances in computers, telecommunications, biotechnology, and space exploration. In the wake of this technological upheaval, entire industries and lifestyles are being overturned, only to give rise to entirely new ones. But these rapid, bewildering changes are not just quantitative. They mark the pangs of a new era.²⁵

In this book, Kaku writes from the point of view of "an emerging consensus of scientists."²⁶ "From now to the year 2020, scientists foresee an explosion in scientific activity such as the world has never seen before."²⁷ Kaku believes that the "computer revolution" will drive many changes and will affect life as a whole. It is his conclusion that microchips will become so small and so inexpensive that they will cost only one penny and will be embedded in almost everything, from glasses to clothing to paper.²⁸ In addition, Kaku believes that "the completed human genome will be decoded by the year 2005, giving us an 'owner's manual' for a human being. This will set the stage for twenty-first century science and medicine... the

biomolecular revolution will ultimately give us the nearly god-like ability to manipulate life almost at will."²⁹ He also believes that "in the future, we will be able to manipulate [intelligence] according to our wishes."³⁰

When one takes these prognoses into consideration, and overlays the certainty that: (1) there will be downturns of the business cycle during this period which usually lead to economic hardship; (2) there will continue to be countries that are less developed than the United States; and (3) religious differences will continue to lead to conflict, then it is clear that the world will continue to be an unstable place in 2020. This instability is likely to prompt terrorists to attack the dominant superpower that the U.S. will continue to be because we will represent the most glaring difference between the global haves and the have-nots.

This instability will potentially be more dangerous in that science will have progressed to such a level that the technology to create weapons of mass destruction will be available to many more people and the tools with which to make these weapons will be readily available as well. With the ability to manipulate life itself, an enemy will be more likely to be able to clone a terrorist, someone who would be engineered to perform terrorist acts. Also, the ability to reconfigure a person's mind so that a person who is a trusted member of society could be "re-

engineered" to commit an act of terrorism might also be possible.

Moreover, with such advances in science and technology will come the ability to create new toxins and/or variations of existing toxins. Even now, a terrorist can take a known virus strain, manipulate it and create one for which an antidote has yet to be produced. The use of these scientifically altered viruses may be countered, but not until they are detected, analyzed and an antidote created.

Countering these "terrorist" innovations will be advancements in science that will enable the authorities to better detect and analyze the presence and type of chemical and biological weapons that might be used. As stated above, antibiotics can be constructed to counter viruses and toxins. Scientific advances should also provide for an increased ability for medicine to respond to diagnosed, but unidentifiable medical conditions which may result in the sustainment of life long enough for an antidote to be developed.

Technological advances will result in most TV screens being flat enough to hang on a wall like a picture (this technology already exists) and computer screens being the size of a watch.³¹ Technological advances may further result in the creation of devices which will immediately identify the presence of a toxin, virus, or even a destructive device before it can even be

delivered to the intended release point. Such devices may operate by satellite, building sensor, or even a traffic-related street sensor.

Another threat to this country in the year 2020 will be attacks on the telecommunications infrastructure. While taking of lives by WMD may be detrimental to a terrorist's cause, the destruction of "equipment" will have less of an adverse effect upon the support that organization may hope to gain. The telecommunications infrastructure will be so widespread and so large that it will be virtually impossible to protect it at all of its vulnerable points. The disruption of such equipment would have a major adverse impact upon the populace that will be so dependent upon it for everyday activities that the goal of a terrorist might be better served by such an attack.

By 2020, the telecommunications systems will be unimaginably sophisticated. People will be able to talk to one another from anywhere on the planet and such systems will be near universal. An attack on the telecommunications structure in the U.S. by a terrorist group, possibly using an explosive device, would definitely constitute an emergency in 2020. With the country so reliant on communications at that time, disruption of the telecommunication equipment and the resultant disruption of communications would cause tremendous inconvenience and numerous emergencies in the blacked-out area.

For instance, if the means of communication are disrupted, police, fire departments and other emergency responders may be unable to be notified of such emergencies. Hopefully by 2020, other means of communications would be available which would immediately cut in and provide a source of backup power for the lost communications equipment. If this attack were accompanied by an attack on the utility system of that area as well as by a chemical and/or biological attack, the effects would be disastrous. Such an attack could lead to the unprecedented loss of life and property -- compounded by an inability of the emergency responders to be notified or to respond in a timely manner.

2020 RAID ELEMENTS

The 2020 RAID elements will have to adapt to the scientific and technological advances which are likely to occur by that date. The ability of the element to appear on the scene in person in a timely manner should be improved by advances in air, ground and sea transportation. It is even possible -- although unlikely -- that the theory of molecular displacement (as in Star Trek) will be advanced to the point that the element could be instantly transported to the scene of a WMD event. In any case, the advent of technology should provide other means of interfacing with the civilian authorities. The advances in telecommunications will make computer/telephone contact more

efficient and more practical. If the scene is one of a detonation of a large explosive, with no chemical or biological agent involved, contact with the RAID element can best be made by such telecommunications techniques as television-telephone communications. The presence of the RAID element may not be needed but their advice probably will be required. Through the use of a television-telephone, element members could view the scene, analyze the situation, and give advice without being present and should be able to respond in a more timely manner than if required to be at the scene. If the element's presence is needed due to the nature of the incident, the element can be in transit while remaining in constant contact with the authorities on the scene. This technology would be akin to adding a picture to a cellular phone.

The 2020 RAID element also is likely to have more sophisticated and sensitive sensor devices to detect the presence of chemical or biological toxins -- devices that would be capable of determining the extent to which the toxins had spread and advising the local authorities almost immediately of their findings.

The RAID element might be superfluous and without a mission in 2020. If technological advances continue as predicted by Kaku and others, the local authorities could be just as qualified as the RAID elements to detect toxins, initiate

communications with the "outside" world, and provide professional medical care to the injured. The only "value added" that a RAID element then might offer would be to serve as liaison between the military and the civilian authorities. The element would then perform as a go-between and assist in coordinating requests for assistance and actual help provided.

HYPOTHETICAL SCENARIO

On June 12, 2021, exactly twenty-two years to the date that the class of 1999 graduated from the U.S. Army War College in Carlisle, Pennsylvania, hundreds of persons in Manhattan Borough, City of New York, New York, suddenly succumb to what is believed to be a biological attack. These persons are vomiting, convulsing, and bleeding from their orifices.

The police are the first to arrive on the scene and find themselves overwhelmed by the same symptoms, despite their automatically self-sealing clothing. Other first responders, fire, police and ambulance arrive, but keep their distance. The "Blue Canary Principle" is instituted. (The "Blue Canary Principle" is to locate the downed police officer (dressed in blue) farthest from the scene that is stricken, and to form a perimeter at a point beyond him).

This area is then cordoned off. The police, using their biological/chemical detection equipment, immediately determine that the cause of the illnesses is a not a natural biological or

chemical compound, but a man-made biological compound whose properties are unknown to them. They immediately contact the governor and the New York National Guard RAID element. This element is only miles away. Contact is made through the overhead satellite to the team's pager/telephone that is the size and shape of today's credit card.

The RAID element was already aware of the situation because, just moments before the call, it was notified by the Multipurpose Integrated Chemical/Biological Agent Alarm III (MICBAD III) which links air sensors to an alarm system which is directly linked to the element's headquarters. MICBAD III also advised the element of the probable type of agent used.

The element's first action is to have the police send it, via pager/telephone (which also serves as a fax machine) their initial findings on the agent used in order to verify the information received from MICBAD III. This request is made and a response received in seconds while the element is moving from their headquarters to their dedicated transportation, something akin to a helicopter but a sleeker, more aerodynamic and faster than a helicopter -- more like a hover car.

This car is also equipped with High Digital Television (HDTV) which is as flat as a "mouse pad" and is approximately 20 inches by 12 inches. This HDTV is programmed to view the scene of the incident within seconds. This is made possible by

connecting to the satellites that are constantly above the city. While this is happening, the FBI and FEMA arrive on the scene with the FBI taking charge of the consequence management, pursuant to federal regulations.

The RAID element, while en-route to the scene, quickly analyzes the substance, and before it arrives, the team has communicated to the FBI and other agencies confirmation as to what the substance is and how to counteract it. The element commander advises the FBI what the properties of this substance are, how much time elapses between contact with it and the onset of symptoms, as well as what treatment can be given the victims. The element also advises the FBI on how to protect themselves from the agent until such time as adequate protective gear is in place. In addition, the team also advises the FBI that their ETA is 30 seconds, that it has a sufficient amount of antidote serum on the way to protect the responders to the scene and that the Department of the Army has been contacted and is sending enough serum to administer to the stricken.

Upon arrival, the RAID element immediately deploys, reconfirms the findings made by the police, and provides advice and assistance to the federal, state and local authorities on the scene. It becomes apparent to the element that the number of casualties will far exceed the limited transportation assets available.

The RAID logistics team, upon confirmation with the operations team that the scene has been declared a national emergency, (or under the authority of regulations which allow military commanders to provide assistance where life and/or limb are in immediate jeopardy without prior approval or declaration of a national emergency) coordinates with the nearest DoD facility with ground and helicopter-type vehicles and arranges for these assets to be made immediately available, along with drivers and pilots. Again, this is done by way of the pager/telephone which has a direct satellite link to that installation.

The RAID medical team makes itself available to the physicians at the scene or in the hospitals, wherever they are most needed, to advise medical personnel and to call in federal medical support, if necessary. Inasmuch as the scene of this incident is New York City, it is determined that there are sufficient medical personnel available so that the military need not provide any medical personnel.

Meanwhile, the RAID communications team has established a base and is in constant communications with the FBI, FEMA, and DoD. The RAID survey team has donned its chemical/biological protective gear and is determining the outer-most limits of the contaminated area. This team is also in consultation with FEMA concerning the most effective way to clean up the scene once the

casualties are taken out and whatever investigation must be done is completed.

During this period, the RAID operations team is directing the movement of the team and the coordination with the other responders at the scene. The RAID administrative team is also assisting in coordination efforts.

The hypothetical ends with the RAID element being released to return to their base after the federal, state, and local authorities have the situation under control and there is no further need for their consultation or coordination.

CONCLUSION

In 2020, terrorism will continue to be a major concern and threat to the United States. The United States will continue to be a superpower and thus a target for those who are dissatisfied with their lot in life. Although technological and scientific advances will greatly benefit humanitarian and peaceful ends, this same technology will be used against the United States in the form of asymmetric attacks by foreigners as well as by disgruntled citizens.

Upon the occurrence of an incident involving the use of WMD, the RAID elements will be called upon to render assistance and coordination to the local, state, and federal authorities. This assistance will take be in the nature of medical advice, coordination for military support, and assistance with

casualties. In addition, the technologically advanced and trained survey teams will be equipped to immediately determine the radius of the contaminant where a biological or chemical agent is used.

RAID elements will continue to be relevant in the year 2020. Although their mission may change and technology will provide localities with some of the same assets locally which the team might offer, their assistance would continue to be valuable, especially in coordinating between federal, state and local responders. In many cases the elements would be tasked to provide expert advice through telecommunication devices instead of being required to move to the scene within four hours. If elements are required to deploy to a scene, the response time would theoretically be reduced in 2020 by anticipated technological improvements in the means of transportation as well as in the means of communications. As in the scenario above, the elements would be able to be in constant video contact with the authorities at any such scene prior to their arrival.

Given the proper funding, resources and training, the RAID concept is a viable and competent means of responding to incidents of the use of WMD in the continental United States.

WORD COUNT: 6,465

ENDNOTES

¹ William S. Cohen, Report of the Quadrennial Defense Review (Washington, D.C.: U.S. Government Printing Office, 1997)

² National Defense Panel, Transforming Defense National Security into the 21st Century, Report of the National Defense Panel (Washington, D.C.: U.S. Government Printing Office, 1998) 199

³ William J. Clinton, A National Security Strategy for a New Century (Washington, D.C.: U.S. Government Printing Office, 1998), 6

⁴ Benjamin Netanyahu, Terrorism: How the West Can Win (New York: The Jonathan Institute, 1986), 10

⁵ Stephen A. Sloan, "Terrorism and Asymmetry," in Challenging the United States Symmetrically and Asymmetrically: Can America Be Defeated? ed. Col Lloyd J. Mathews (Carlisle Barracks: United States War College, Strategic Studies Institute, 1998) 186

⁶ Clinton, 15

⁷ Hans Binnendijk, ed., 1998 Strategic Assessment, Engaging Power for Peace (Washington, D.C.: U.S. Government Printing Office, 1998), 199

⁸ Cohen, 4

⁹ National Defense Panel, 25

¹⁰ Madeleine Albright, "We Will Not Be Intimidated," Newsweek, 24 Aug. 1998, 33

¹¹ William J. Clinton, "Our Objective Was to Damage Their Capacity to Strike," Washington Post, 21 Aug 1998, sec.A p.17

¹² "Foreign Terrorist Organizations," linked from U.S. Department of State, available from <<http://www.state.gov>> Internet. accessed 8 October 1998

¹³ Clinton, A National Security Strategy for a New Century, 16

¹⁴ Ibid.

¹⁵ Ibid., 15-20

¹⁶ National Defense Panel, 26

¹⁷ "Presidential Directives and Executive Orders, May 22, 1998 Fact Sheet," available from <<http://fas.org/irp/offsetdocs/pdd-62.htm>> Internet. accessed 6 January 1999.

¹⁸ Clinton, 20-21

¹⁹ Colleen Wolfe, "The Guard Takes the Lead," National Guard 52 (May, 1998): 18

²⁰ "DoD Establishes Office to Implement Guard and Reserve Role in Domestic Terrorist Attacks," National Guard 52 (April 1998): 14-15

²¹ "Reserves Spearhead Military Response to WMD Terrorism," Army 48 (May 1998): 63

²² "DoD Establishes Office to Implement Guard and Reserve Role in Domestic Terrorist Attacks," National Guard 52 (April, 1998): 14-15

²³ Binnendijk, 199

²⁴ Ibid.

²⁵ Michio Kaku, VISIONS - How Science Will Revolutionize the Twenty-first Century (New York: Anchor Books, 1998) 4

²⁶ Ibid., 5

²⁷ Ibid., 14

²⁸ Ibid., 24

²⁹ Ibid., 9

³⁰ Ibid., 8

³¹ Ibid., 56

BIBLIOGRAPHY

Albright, Madeline. "We Will Not be Intimidated." Newsweek, 24 Aug 1998, 33

Anonymous. "18 Years of Punishment." Congressional Quarterly Weekly Report. (May 1998): 1323

Bender, David & Leone, Bruno. 21st Century Earth, Opposing Viewpoints. San Diego: Breenhaven Press, 1996

Betts, Richard K. "The Threat of Mass Destruction." Foreign Affairs 77 (Jan/Feb 1998); 26-41

Binnendijk, Hans., ed., 1998 Strategic Assessment, Engaging Power for Peace. Washington: U.S. Government Printing Office, 1998, 199

Clinton, William J. A National Security Strategy for a New Century. Washington: The White House

_____. "Our Objective Was to Damage Their Capacity to Strike." Washington Post, 21 Aug 1998, sec. A, p. 17

Cohen William S. Annual Report to the President and the Congress. Washington: U.S. Government Printing Office, 1998

_____. Report of the Quadrennial Defense Review. Washington: U.S. Government Printing Office, 1997

DeHennis, LTC Philip M. "Terrorism: National Security and Strategy and A Local Threat Response." U.S. Army War College: Carlisle, Pennsylvania, 1997

"DoD Establishes Office to Implement Guard and Reserve Role in Domestic Terrorist Attacks." National Guard, 52 (April, 1998): 14-15

Erickson, Lt. Col. Richard J. Legitimate Use of Military Force Against State-Sponsored International Terrorism. Maxwell Air Force Base, Alabama: Air University Press, 1989

Falkenrath, Richard A. "Confronting Nuclear Biological and Chemical Terrorism." Survival, 40 (Autumn 1998): 43-51

Farrell, William R. The U.S. Government Response to Terrorism. Boulder: Westview Press, 1982

Foreign Terrorist Organizations, U.S. Department of State,
<http://www.state.gov/>; Internet; Accessed 12 April 1999.

Gal-Or, Noemi, International Cooperation to Suppress Terrorism.
New York: St. Martin's Press, 1985

Jordan, Amos A. "Approaches to National Security for the 1990's." Maryland: The Johns Hopkins University Press, 1981

Kaku, Michio. VISIONS - How Science Will Revolutionize the Twenty-first Century. New York: Anchor Books, 1998

Krulak, V.H. "Terrorism At Home." Strategic Review, Fall 1997: 5-6

Livingstone, Neil C. and Arnold, Terrell E. Fighting Back: Winning the War Against Terrorism. Lexington: Lexington Books, 1984

Mercer, Charles L. Jr. "Terrorists, WMD and the U.S. Army Reserve." Parameters, XXVII (Autumn 1997): 98-106

National Defense Panel. Transforming Defense National Security in the 21st Century, Report of the National Defense Panel. Washington: U.S. Government Printing Office, 1997

Netanyahu, Benjamin. Terrorism: How the West Can Win. New York: The Jonathan Institute, 1986

Presidential Directives and Executive Orders, May 22, 1998 Fact Sheet, <<http://fas.org/irp/offsetdocs/pdd-62.html>>; Internet; Accessed 3 March 1999

"Reserves Spearhead Military Response to WMD Terrorism." Army 48 (May, 1998): 63

Sloan, Stephen A. "Terrorism and Asymmetry," in Challenging the United States Symmetrically and Asymmetrically: Can America Be Defeated?, ed. Col Lloyd J. Mathews (Carlisle Barracks: United States War College, Strategic Studies Institute, 1998), 186

Sprinzak, Ehud. "The Great Superterrorism Scare." Foreign Policy, 112 (Fall 1998): 110-120

"Ten States Named to Host 'Homeland Defense' Pilot Program." National Guard, 52 (July 1998) 12-13

Tucker, David. "Responding to Terrorism." The Washington Quarterly, 21 (Winter 1998): 103-117

Wolfe, Colleen. "Guarding the Homeland." National Guard, 52 (May 1998) 16-19

_____. "The Guard Takes the Lead." National Guard, 52 (May 1998): 18